



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.														
10/652,846	08/29/2003	Timothy J. O'Brien	D6020CIP4	5440														
7590 Benjamin Aaron Adler ADLER & ASSOCIATES 8011 Candle Lane Houston, TX 77071		06/04/2007	<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">HUYNH, PHUONG N</td></tr><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>1644</td><td></td></tr><tr><td colspan="2"><table border="1"><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>06/04/2007</td><td>PAPER</td></tr></table></td></tr></table>		EXAMINER		HUYNH, PHUONG N		ART UNIT	PAPER NUMBER	1644		<table border="1"><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>06/04/2007</td><td>PAPER</td></tr></table>		MAIL DATE	DELIVERY MODE	06/04/2007	PAPER
EXAMINER																		
HUYNH, PHUONG N																		
ART UNIT	PAPER NUMBER																	
1644																		
<table border="1"><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>06/04/2007</td><td>PAPER</td></tr></table>		MAIL DATE	DELIVERY MODE	06/04/2007	PAPER													
MAIL DATE	DELIVERY MODE																	
06/04/2007	PAPER																	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/652,846

Applicant(s)

O'BRIEN ET AL.

Examiner

Phuong Huynh

Art Unit

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 52-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>sequence alignment</u> . |

DETAILED ACTION

1. Claims 52-55 are pending.
2. Applicant's election without traverse of Group I, claims 1-8 and 52-55 (now claims 52-55) in the reply filed on 10/10/06 is acknowledged.
3. Claims 52-55, drawn to an isolated DNA encoding a TADG-14 protein with SEQ ID NO: 7 and to an isolated DNA encoding a TADG-14 variant protein with SEQ ID NO: 75 are being acted upon in this Office Action.
4. The filing date of the instant claims is deemed to be the filing date of the application 09/796,294, filed February 28, 2001. This is because US applications 09/618,259 filed July 18, 2000, 09/137,944 filed August 21, 1998 and 08/915,659 filed August 21, 1997 do not support the claimed limitation of isolated DNA encoding a TADG-14 protein variant, said TADG-14 variant having the amino acid sequence of SEQ ID NO: 75, as well as vector and host cell adapted for expression of TADG-14 protein of the instant application.
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:
A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
6. Claims 52-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsui et al (Eur J Biochem 260: 627-634, 1999; PTO 892).

Mitsui et al teach an isolated DNA encoding a human neuropsin that has an amino acid sequence 100% identical to TAG-14 variant having the amino acid sequence of SEQ ID NO: 75 of instant application (see nucleic acid sequence at page 628, col. 2, Fig 2, sequence alignment, in particular). Mitsui et al teach a vector such as BAC-TO-BAC comprising regulatory elements necessary for expressing the reference protein in host cell such as insect cell (see page 629, col. 2, Recombinant neuropsin using a baculovirus expression system, in particular). Thus, the reference teachings anticipate the claimed invention.

Art Unit: 1644

7. No claim is allowed.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Huynh "NEON" whose telephone number is (571) 272-0846. The examiner can normally be reached Monday through Friday from 9:00 am to 5:30 p.m. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The IFW official Fax number is (571) 273-8300.
9. Any information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Phuong Huynh/

Patent Examiner

Technology Center 1600

May 28, 2007

<!--StartFragment-->RESULT 2

AB008927

LOCUS AB008927 998 bp mRNA linear PRI 03-AUG-1999

DEFINITION Homo sapiens mRNA for neuropsin type2, complete cds.

ACCESSION AB008927

VERSION AB008927.1 GI:5672478

KEYWORDS neuropsin type2.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Haplorrhini;
Catarrhini; Hominidae; Homo.

REFERENCE 1

AUTHORS Mitsui,S., Tsuruoka,N., Yamashiro,K., Nakazato,H. and Yamaguchi,N.

TITLE A novel form of human neuropsin, a brain-related serine protease,
is generated by alternative splicing and is expressed
preferentially in human adult brain

JOURNAL Eur. J. Biochem. 260 (3), 627-634 (1999)

PUBMED 10102990

REFERENCE 2 (bases 1 to 998)

AUTHORS Yamaguchi,N. and Mitsui,S.

TITLE Direct Submission

JOURNAL Submitted (19-NOV-1997) Nozomi Yamaguchi, Kyoto Prefectural
University of Medicine, Research Institute of Neurological Diseases
and Geriatrics; Kawaramati Hirokoji Kajii-cho, Kamigyo-ku,, Kyoto,
Kyoto 602, Japan (E-mail:nozomi@koto.kpu-m.ac.jp,
Tel:+81-75-251-5848, Fax:+81-75-251-5848)

FEATURES

source Location/Qualifiers

1. .998

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/tissue_type="Brain"

/tissue_lib="Brain Placenta"

CDS 22. .939

/codon_start=1

/product="neuropsin type2"

/protein_id="BAA82666.1"

/db_xref="GI:5672479"

/translation="MGRPRPRAAKTWMFLLLLGGAWAACGSLDLLTKLYAENLPCVHL
NPQWPSQPSHCPRGWSNPLPPAAGHSRAQEDKVLGGHECQPHSQPWQAALFQGQQLL
CGGVLVGGNWVLTAAHCKKPKYTVRLGDHSLQNKDGPQEIPVVQSIHPFCYNSSDVE
DHNHDLMLQLRDQASLGSVKVKPISLADHCTQPGQKCTVSGWGTVTSPRENFPTLNC
AEVKIFPQKKCEDAYPGQITDGMVCAGSSKGADTCQGDSSGGPLVCDGALQGITSWGSD
PCGRSDKPGVYTNICRYLDWIKKIIGSKG"

ORIGIN

Alignment Scores:

Pred. No.:	5.63e-145	Length:	998
Score:	1708.00	Matches:	305
Percent Similarity:	100.0%	Conservative:	0
Best Local Similarity:	100.0%	Mismatches:	0
Query Match:	100.0%	Indels:	0
DB:	5	Gaps:	0

US-10-652-846-75 (1-305) x AB008927 (1-998)

Qy	1	MetGlyArgProArgProArgAlaAlaLysThrTrpMetPheLeuLeuLeuLeuGlyGly	20
Db	22	ATGGGACGCCCGACCTCGTGCAGCAAGACGTGGATGTTCTCTGCTGCTGGGGGA	81
Qy	21	AlaTrpAlaAlaCysGlySerLeuAspLeuLeuThrLysLeuTyrAlaGluAsnLeuPro	40
Db	82	GCCTGGGACGCTGTGGAAGCCTGGACCTCCTCACTAAGTTGTATGCGGAGAACTTGCCG	141
Qy	41	CysValHisLeuAsnProGlnTrpProSerGlnProSerHisCysProArgGlyTrpArg	60
Db	142	TGTGTCCATTGTAACCCACAGTGGCCTTCCAGCCCTCGCACTGCCCCAGAGGTGGCGA	201
Qy	61	SerAsnProLeuProProAlaAlaGlyHisSerArgAlaGlnGluAspLysValLeuGly	80
Db	202	TCCAACCCTCTCCCTCTGCTGCGAGGACACTCCAGGGCACAGGAGGACAAGGTGCTGGGG	261
Qy	81	GlyHisGluCysGlnProHisSerGlnProTrpGlnAlaAlaLeuPheGlnGlyGlnGln	100
Db	262	GGTCATGAGTGCCAACCCATTTCGAGCCTTGGCAGGCGGCCTTGTTCAGGGCCAGCAA	321

```

Qy      101 LeuLeuCysGlyGlyValLeuValGlyGlyAsnTrpValLeuThrAlaAlaHisCysLys 120
        |||
Db      322 CTACTCTGTGGCGGTGTCCTTGTAGGTGGCAACTGGGTCCCTACAGCTGCCCACTGTAAA 381

Qy      121 LysProLysTyrThrValArgLeuGlyAspHisSerLeuGlnAsnLysAspGlyProGlu 140
        |||
Db      382 AAACCGAAATACACAGTACGCCTGGGAGACCACAGCCTACAGAATAAGATGGCCAGAG 441

Qy      141 GlnGluIleProValValGlnSerIleProHisProCysTyrAsnSerSerAspValGlu 160
        |||
Db      442 CAAGAAATACCTGTGGTTCAGTCCATCCACACCCCTGCTACAACAGCAGCGATGTGGAG 501

Qy      161 AspHisAsnHisAspLeuMetLeuLeuGlnLeuArgAspGlnAlaSerLeuGlySerLys 180
        |||
Db      502 GACCACAACCATGATCTGATGCTTCTTCAACTGCGTGACCAGGCATCCCTGGGGTCCAAA 561

Qy      181 ValLysProIleSerLeuAlaAspHisCysThrGlnProGlyGlnLysCysThrValSer 200
        |||
Db      562 GTGAAGCCCATCAGCCTGGCAGATCATTGACCCAGCCTGGCCAGAAGTGACCGTCTCA 621

Qy      201 GlyTrpGlyThrValThrSerProArgGluAsnPheProAspThrLeuAsnCysAlaGlu 220
        |||
Db      622 GGCTGGGGCACTGTCCAGTCCCGAGAGAATTTCTGACACTCTCAACTGTGCAGAA 681

Qy      221 ValLysIlePheProGlnLysLysCysGluAspAlaTyrProGlyGlnIleThrAspGly 240
        |||
Db      682 GTAAAAATCTTTCCCAAGAAGTGTGAGGATGCTTACCCGGGGCAGATCACAGATGGC 741

Qy      241 MetValCysAlaGlySerSerLysGlyAlaAspThrCysGlnGlyAspSerGlyGlyPro 260
        |||
Db      742 ATGGTCTGTGCAGGCAGCAGCAAAGGGGCTGACACGTGCCAGGGCGATTCTGGAGGCCCC 801

Qy      261 LeuValCysAspGlyAlaLeuGlnGlyIleThrSerTrpGlySerAspProCysGlyArg 280
        |||
Db      802 CTGGTGTGTGATGGTGCCTCCAGGGCATCACATCCTGGGGCTCAGACCCCTGTGGGAGG 861

Qy      281 SerAspLysProGlyValTyrThrAsnIleCysArgTyrLeuAspTrpIleLysLysIle 300
        |||
Db      862 TCCGACAAACCTGGCGTCTATACCAACATCTGCCGCTACCTGGACTGGATCAAGAAGATC 921

Qy      301 IleGlySerLysGly 305
        |||
Db      922 ATAGGCAGCAAGGGC 936
<!--EndFragment-->

```